Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

NATIONAL QUALITY MEASURES CLEARINGHOUSE

General

Title

Myelodysplastic syndromes (MDS): percentage of higher-risk MDS patients receiving azacitidine or decitabine.

Source(s)

American Society of Hematology (ASH). Myelodysplastic syndromes (MDS) measure set: measure specifications. Washington (DC): American Society of Hematology (ASH); 2017 Feb. 14 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of higher-risk (intermediate-2, or high-risk using International Prognostic Scoring System [IPSS], very high-risk using IPSS-R, and/or with excess blasts, or high- or very high-risk using World Health Organization-based Prognostic Scoring System [WPSS]) myelodysplastic syndromes (MDS) patients greater than 18 years old receiving azacitidine or decitabine.

Rationale

Statement from the Myelodysplastic Syndromes (MDS) Task Force:
Recently revised National Comprehensive Cancer Network (NCCN) guidelines for MDS (2015) recommend the use of azacitidine or decitabine within the algorithm for the treatment of higher-risk MDS patients. The definition of higher risk patient was expanded to include World Health Organization-based Prognostic Scoring System (WPSS) High and Very High in 2014.

Excerpts (verbatim) from guidelines:

[Conventional d]rug treatments for patients with high-risk myelodysplastic syndromes provide no survival advantage. In this trial, we aimed to assess the effect of azacitidine on overall survival compared with the three commonest conventional care regimens… Treatment with azacitidine increases overall survival in patients with higher-risk myelodysplastic syndromes relative to conventional care (Fenaux et al., 2009).

[In a study to compare low-dose decitabine to best supportive care (BSC) in higher-risk patients with myelodysplastic syndrome (MDS) age 60 years or older and ineligible for intensive chemotherapy…] Decitabine administered in 6-week cycles is active in older patients with higher-risk MDS, resulting in improvements of OS [overall survival] and AMLFS [acute myeloid leukemia-free survival] (nonsignificant), of PFS [progression-free survival] and AML transformation (significant), and of QOL [quality of life] (Lübbert et al., 2011).

Evidence for Rationale

American Society of Hematology (ASH). Myelodysplastic syndromes (MDS) measure set: measure specifications. Washington (DC): American Society of Hematology (ASH); 2017 Feb. 14 p.

Fenaux P, Mufti GJ, Hellstrom-Lindberg E, Santini V, Finelli C, Giagounidis A, Schoch R, Gattermann N, Sanz G, List A, Gore SD, Seymour JF, Bennett JM, Byrd J, Backstrom J, Zimmerman L, McKenzie D, Beach C, Silverman LR, International Vidaza High-Risk MDS Survival Study Group. Efficacy of azacitidine compared with that of conventional care regimens in the treatment of higher-risk myelodysplastic syndromes: a randomised, open-label, phase III study. Lancet Oncol. 2009 Mar;10(3):223-32. PubMed

LÃ¼bbert M, Suciu S, Baila L, RÃ¼ter BH, Platzbecker U, Giagounidis A, Selleslag D, Labar B, Germing U, Salih HR, Beeldens F, Muus P, PflÃ¼ger KH, Coens C, Hagemeijer A, Eckart Schaefer H, Ganser A, Aul C, de Witte T, Wijermans PW. Low-dose decitabine versus best supportive care in elderly patients with intermediate- or high-risk myelodysplastic syndrome (MDS) ineligible for intensive chemotherapy: final results of the randomized phase III study of the European Organisation for Research and Treatment of Cancer Leukemia Group and the German MDS Study Group. J Clin Oncol. 2011 May 20;29(15):1987-96. PubMed

National Comprehensive Cancer Network (NCCN). NCCN clinical practice guidelines in oncology: myelodysplastic syndromes. V1.2016. Fort Washington (PA): National Comprehensive Cancer Network (NCCN); 2015 May 28.

Primary Health Components

Higher-risk myelodysplastic syndromes (MDS); International Prognostic Scoring System (IPSS, IPSS-R); World Health Organization-Based Prognostic Scoring System (WPSS); azacitidine; decitabine

Denominator Description

The number of myelodysplastic syndromes (MDS) patients in your selection who are higher-risk (intermediate-2, or high-risk using International Prognostic Scoring System [IPSS], very high-risk using IPSS-R, and/or with excess blasts, or high- or very high-risk using World Health Organization-based Prognostic Scoring System [WPSS])

See the related "Denominator Inclusions/Exclusions" field.

Numerator Description

The number of myelodysplastic syndromes (MDS) patients in your selection who are

Higher-risk (intermediate-2, or high-risk using International Prognostic Scoring System [IPSS], very high-risk using IPSS-R, and/or with excess blasts, or high- or very high-risk using World Health Organization-based Prognostic Scoring System [WPSS])
AND

Receiving azacitidine or decitabine

See the related "Numerator Inclusions/Exclusions" field.

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Evidence of gap:
The use of azacitidine or decitabine for the treatment of higher-risk myelodysplastic syndromes (MDS) is a recent addition to the National Comprehensive Cancer Network (NCCN) guidelines. For this reason, we believe there is a gap in use of these therapeutic options. Since 2013, performance for this measure was 79% for 203 patients.

Evidence for Additional Information Supporting Need for the Measure

American Society of Hematology (ASH). Myelodysplastic syndromes (MDS) measure set: measure specifications. Washington (DC): American Society of Hematology (ASH); 2017 Feb. 14 p.

Extent of Measure Testing

The myelodysplastic syndromes (MDS) measure set was developed by the American Society of Hematology (ASH) using a rigorous methodology (adapted from the American Medical Association [AMA]-convened Physician Consortium for Performance Improvement [PCPI]) and has been field tested. The MDS measure set was accepted by American Board of Internal Medicine (ABIM) for use with practice improvement modules meeting Part 4 of Maintenance of Certification Requirements in 2006.

Evidence for Extent of Measure Testing

Frechette S. (Principal, Northfield Associates, LLC, Warren, VT). Personal communication. 2014 Dec 10. 1 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Individual Clinicians or Public Health Professionals

Statement of Acceptable Minimum Sample Size

Specified

Target Population Age

Age greater than 18 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality

Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

Unspecified

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Diagnostic Evaluation

Encounter

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions
The number of myelodysplastic syndromes (MDS) patients in your selection who are higher-risk (intermediate-2, or high-risk using International Prognostic Scoring System [IPSS], very high-risk using IPSS-R, and/or with excess blasts, or high- or very high-risk using World Health Organization-based Prognostic Scoring System [WPSS])

Patients can be included in the chart abstraction if:

- They have been seen by the practice within the past 18 months
- Management decisions regarding care are made primarily by providers in the practice
- They are greater than 18 years old (or the age at which your institution refers to adult hematologists)

Note: Refer to the original measure documentation for a list of International Classification of Diseases, Tenth Revision (ICD-10) codes used in MDS patient selection.

Exclusions

- Patient with successful hematopoietic stem cell transplant
- Patient refused treatment

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions
The number of myelodysplastic syndromes (MDS) patients in your selection who are

- Higher-risk (intermediate-2, or high-risk using International Prognostic Scoring System [IPSS], very high-risk using IPSS-R, and/or with excess blasts, or high- or very high-risk using World Health Organization-Based Prognostic Scoring System [WPSS])
  AND
- Receiving azacitidine or decitabine

Note: Receiving azacitidine or decitabine means you prescribed or confirmed that the patient was prescribed azacitidine or decitabine. Refer to the original measure documentation for a list of International Classification of Diseases, Tenth Revision (ICD-10) codes used in MDS patient selection and a list of Healthcare Common Procedure Coding System (HCPCS) codes for azacitidine or decitabine.

Exclusions

- Patient with successful hematopoietic stem cell transplant
- Patient refused treatment

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Measure 5: Higher-risk (intermediate-2, or high-risk using IPSS, very high-risk using IPSS-R, and/or with excess blasts, or high- or very high-risk using WPSS) MDS patient receiving azacitidine or decitabine.

Measure Collection Name

Myelodysplastic Syndromes Measure Set

Submitter

American Society of Hematology - Medical Specialty Society

Developer

American Society of Hematology - Medical Specialty Society

Funding Source(s)

The American Society of Hematology

Composition of the Group that Developed the Measure

The American Society of Hematology (ASH) Myelodysplastic Syndromes (MDS) Task Force:

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Financial Disclosures/Other Potential Conflicts of Interest

Unspecified

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2017 Feb

Measure Maintenance

American Society of Hematology (ASH) reviews/updates measures annually

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

This measure updates a previous version: American Society of Hematology (ASH). Myelodysplastic syndromes (MDS) measure set: measure specifications. Washington (DC): American Society of Hematology (ASH); 2015 Dec. 16 p.

Measure Availability

Source not available electronically.

For more information, contact the American Society of Hematology (ASH) at 2021 L Street NW, Suite 900, Washington, DC 20036; Phone: 202-776-0544; Fax: 202-776-0545; Web site: www.hematology.org .

NQMC Status

This NQMC summary was completed by ECRI Institute on July 20, 2015. The information was verified by

the measure developer on August 27, 2015.

This NQMC summary was updated by ECRI Institute on April 18, 2016. The information was verified by the measure developer on May 24, 2016.

This NQMC summary was updated again by ECRI Institute on March 21, 2017. The information was verified by the measure developer on May 3, 2017.

Copyright Statement

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Production

Source(s)

American Society of Hematology (ASH). Myelodysplastic syndromes (MDS) measure set: measure specifications. Washington (DC): American Society of Hematology (ASH); 2017 Feb. 14 p.

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